IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): A zoom lens apparatus, comprising:

a first optical lens group having a negative focal length arranged at a first position closest to a subject;

a second optical lens group having a positive focal length arranged at a second position second closest to the subject;

an aperture diaphragm which is disposed to a subject side of the second optical lens group closer to the subject in a manner such that the aperture diaphragm is movable integrally with the second optical lens group; and

a third optical lens group having a positive focal length arranged at a third position third closest to the subject,

wherein the first optical lens group, the second optical lens group, and the third optical lens group move in such a way that a distance between the first optical lens group and the second optical lens group is gradually decreased and a distance between the second optical lens group and the third optical lens group is gradually increased when a scaling of the zoom lens system is changed from a short focal length edge to a long focal length edge,

wherein the second optical lens group comprises a three-group and four-lens structure which comprises:

a positive lens arranged at a first sub-position closest to the subject in the second optical lens group and such that a greater-curvature surface of the positive lens faces the subject;

a negative meniscus lens arranged at a second sub-position second closest to the subject in the second optical lens group and such that a concave of the negative meniscus lens faces the subject;

a positive meniscus lens conjoined with the negative meniscus lens and arranged at a third sub-position third closest to the subject in the second optical lens group; and

a positive lens arranged at a fourth sub-position fourth closest to the subject in the second optical lens group,

wherein the zoom lens system satisfies an inequality condition $0.15<(N_{22}-N_{23})<0.40$, wherein N22 is a refractive index of the negative meniscus lens of the second optical lens group and N23 is a refractive index of the positive meniscus lens of the second optical lens group conjoined with the negative meniscus lens.

Claim 2 (Original): The zoom lens system according to Claim 1, wherein the zoom lens system satisfies an inequality condition $25<(\nu_{22}-\nu_{23})<50$, wherein ν_{22} is an Abbe number of the negative meniscus lens in the second optical lens group and ν_{22} is an Abbe number of the positive meniscus lens conjoined with the negative meniscus lens in the second optical lens group.

Claim 3 (Currently Amended): The zoom lens system according to Claim 1, wherein the zoom lens system satisfies an inequality condition $1.40<((1/r_{21F})+(1/_{r22F})+(1/_{r22R}))\underline{*Y'}<2.20$, wherein r_{21F} is a radius of curvature of a subject-side surface of the positive lens arranged at the first sub-position in the second optical lens group, r_{22F} is a radius of curvature of a subject-side surface of the negative meniscus lens arranged at the second sub-position in the second optical lens group, r_{22R} is a radius of curvature of a conjoined surface of the negative meniscus lens arranged at the second sub-position and the positive lens arranged at the third sub-position in the second optical lens group, and Y' is an image height.

Claim 4 (Original): The zoom lens system according to Claim 1, wherein the zoom lens system satisfies an inequality condition $1.40<(L_{PN}/L_2)<0.70$, wherein L_{PN} is a distance between a summit of the subject-side surface of the positive lens arranged at the first sub-position and a summit of the conjoined surface of the negative meniscus lens arranged at the second sub-position and the positive lens arranged at the third sub-position in the second optical lens group, and L_2 is a thickness of the second optical lens group in a direction of a light axis of the second optical lens group.

Claim 5 (Original): The zoom lens system according to Claim 1, wherein the conjoined surface of the negative meniscus lens arranged at the second sub-position and the positive lens arranged at the third sub-position has a radius of curvature which is greatest among lens surfaces included in the second optical lens group.

Claim 6 (Original): The zoom lens system according to Claim 1, wherein the subject-side surface of the positive lens arranged at the first sub-position in the second optical lens group and an image-side surface of the positive lens arranged at the fourth sub-position are aspherical.

Claim 7 (Currently Amended): A zoom lens apparatus, comprising:

a first optical lens group having a negative focal length arranged at a first position closest to a subject;

a second optical lens group having a positive focal length arranged at a second position second closest to the subject;

an aperture diaphragm which is disposed to a subject side of the second optical lens group closer to the subject in a manner such that the aperture diaphragm is movable integrally with the second optical lens group; and

a third optical lens group having a positive focal length arranged at a third position third closest to the subject,

wherein the first optical lens group, the second optical lens group, and the third optical lens group move in such a way that a distance between the first optical lens group and the second optical lens group is gradually decreased and a distance between the second optical lens group and the third optical lens group is gradually increased when a scaling of the zoom lens system is changed from a short focal length edge to a long focal length edge,

wherein the second optical lens group comprises a three-group and four-lens structure which comprises:

a first positive lens arranged at a first sub-position closest to the subject in the second optical lens group and such that a greater-curvature surface of the positive lens faces the subject;

a negative meniscus lens arranged at a second sub-position second closest to the subject in the second optical lens group and such that a concave of the negative meniscus lens faces the subject;

a positive meniscus lens conjoined with the negative meniscus lens and arranged at a third sub-position third closest to the subject in the second optical lens group; and

a second positive lens arranged at a fourth sub-position fourth closest to the subject in the second optical lens group,

wherein the zoom lens system satisfies an inequality condition $1.40<((1/_{r21F})+(1/_{r22F})+(1/_{r22R}))\underline{*Y'}<2.20$, wherein r_{21F} is a radius of curvature of a subject-

side surface of the first positive lens arranged at the first sub-position in the second optical lens group, r_{22F} is a radius of curvature of a subject-side surface of the negative meniscus lens arranged at the second sub-position in the second optical lens group, r_{22F} is a radius of curvature of a conjoined surface of the negative meniscus lens arranged at the second sub-position and the meniscus positive lens arranged at the third sub-position in the second optical lens group, and Y' is an image height.

Claim 8 (Original): A zoom lens apparatus, comprising:

a first optical lens group having a negative focal length arranged at a first position closest to a subject;

a second optical lens group having a positive focal length arranged at a second position second closest to the subject;

an aperture diaphragm which is disposed to a subject side of the second optical lens group closer to the subject in a manner such that the aperture diaphragm is movable integrally with the second optical lens group; and

a third optical lens group having a positive focal length arranged at a third position third closest to the subject,

wherein the first optical lens group, the second optical lens group, and the third optical lens group move in such a way that a distance between the first optical lens group and the second optical lens group is gradually decreased and a distance between the second optical lens group and the third optical lens group is gradually increased when a scaling of the zoom lens system is changed from a short focal length edge to a long focal length edge,

wherein the second optical lens group comprises a three-group and four-lens structure which comprises:

a first positive lens arranged at a first sub-position closest to the subject in the second optical lens group and such that a greater-curvature surface of the first positive lens faces the subject;

a negative meniscus lens arranged at a second sub-position second closest to the subject in the second optical lens group and such that a concave of the negative meniscus lens faces the subject;

a positive meniscus lens conjoined with the negative meniscus lens and arranged at a third sub-position third closest to the subject in the second optical lens group; and

a second positive lens arranged at a fourth sub-position fourth closest to the subject in the second optical lens group,

wherein the zoom lens system satisfies an inequality condition $1.40<(L_{PN}/L_2)<0.70$, wherein L_{PN} is a distance between a summit of the subject-side surface of the first positive lens arranged at the first sub-position and a summit of the conjoined surface of the negative meniscus lens arranged at the second sub-position and the meniscus positive lens arranged at the third sub-position in the second optical lens group, and L_2 is a thickness of the second optical lens group in a direction of a light axis of the second optical lens group.

Claim 9 (Original): A zoom lens apparatus, comprising:

a first optical lens group having a negative focal length arranged at a first position closest to a subject;

a second optical lens group having a positive focal length arranged at a second position second closest to the subject;

an aperture diaphragm which is disposed to a subject side of the second optical lens group closer to the subject in a manner such that the aperture diaphragm is movable integrally with the second optical lens group; and

a third optical lens group having a positive focal length arranged at a third position third closest to the subject,

wherein the first optical lens group, the second optical lens group, and the third optical lens group move in such a way that a distance between the first optical lens group and the second optical lens group is gradually decreased and a distance between the second optical lens group and the third optical lens group is gradually increased when a scaling of the zoom lens system is changed from a short focal length edge to a long focal length edge,

wherein the second optical lens group comprises a three-group and four-lens structure which comprises:

a first positive lens arranged at a first sub-position closest to the subject in the second optical lens group and such that a greater-curvature surface of the first positive lens faces the subject;

a negative meniscus lens arranged at a second sub-position second closest to the subject in the second optical lens group and such that a concave of the negative meniscus lens faces the subject;

a positive meniscus lens conjoined with the negative meniscus lens and arranged at a third sub-position third closest to the subject in the second optical lens group; and

a second positive lens arranged at a fourth sub-position fourth closest to the subject in the second optical lens group,

wherein the conjoined surface of the negative meniscus lens arranged at the second sub-position and the positive lens arranged at the third sub-position has a radius of curvature which is greatest among lens surfaces included in the second optical lens group.

Claim 10 (Original): A digital camera, comprising:

a zoom lens system which comprises:

a first optical lens group having a negative focal length arranged at a first position closest to a subject;

a second optical lens group having a positive focal length arranged at a second position second closest to the subject;

an aperture diaphragm which is disposed to a subject side of the second optical lens group closer to the subject in a manner such that the aperture diaphragm is movable integrally with the second optical lens group; and

a third optical lens group having a positive focal length arranged at a third position third closest to the subject,

wherein the first optical lens group, the second optical lens group, and the third optical lens group move in such a way that a distance between the first optical lens group and the second optical lens group is gradually decreased and a distance between the second optical lens group and the third optical lens group is gradually increased when a scaling of the zoom lens system is changed from a short focal length edge to a long focal length edge,

wherein the second optical lens group comprises a three-group and four-lens structure which comprises:

a positive lens arranged at a first sub-position closest to the subject in the second optical lens group and such that a greater-curvature surface of the positive lens faces the subject;

a negative meniscus lens arranged at a second sub-position second closest to the subject in the second optical lens group and such that a concave of the negative meniscus lens faces the subject;

a positive meniscus lens conjoined with the negative meniscus lens and arranged at a third sub-position third closest to the subject in the second optical lens group; and

a positive lens arranged at a fourth sub-position fourth closest to the subject in the second optical lens group,

wherein the zoom lens system satisfies an inequality condition $0.15<(N_{22}-N_{23})<0.40$, wherein N_{22} is a refractive index of the negative meniscus lens of the second optical lens group and N_{23} is a refractive index of the positive meniscus lens of the second optical lens group conjoined with the negative meniscus lens.

Claim 11 (Original): A personal digital assistance apparatus, comprising:

a zoom lens system which comprises:

a first optical lens group having a negative focal length arranged at a first position closest to a subject;

a second optical lens group having a positive focal length arranged at a second position second closest to the subject;

an aperture diaphragm which is disposed to a subject side of the second optical lens group closer to the subject in a manner such that the aperture diaphragm is movable integrally with the second optical lens group; and

a third optical lens group having a positive focal length arranged at a third position third closest to the subject,

wherein the first optical lens group, the second optical lens group, and the third optical lens group move in such a way that a distance between the first optical lens group and the second optical lens group is gradually decreased and a distance between the second optical lens group and the third optical lens group is gradually increased when a scaling of the zoom lens system is changed from a short focal length edge to a long focal length edge,

wherein the second optical lens group comprises a three-group and four-lens structure which comprises:

a positive lens arranged at a first sub-position closest to the subject in the second optical lens group and such that a greater-curvature surface of the positive lens faces the subject;

a negative meniscus lens arranged at a second sub-position second closest to the subject in the second optical lens group and such that a concave of the negative meniscus lens faces the subject;

a positive meniscus lens conjoined with the negative meniscus lens and arranged at a third sub-position third closest to the subject in the second optical lens group; and

a positive lens arranged at a fourth sub-position fourth closest to the subject in the second optical lens group,

wherein the zoom lens system satisfies an inequality condition $0.15<(N_{22}-N_{23})<0.40$, wherein N_{22} is a refractive index of the negative meniscus lens of the second optical lens group and N_{23} is a refractive index of the positive meniscus lens of the second optical lens group conjoined with the negative meniscus lens.

Claim 12 (Currently Amended): A zoom lens apparatus, comprising:

a first lens group having a negative focal length and arranged at a first position from a subject side;

a second lens group having a positive focal length and arranged at a second position from the subject side;

an aperture diaphragm arranged in front of a subject side surface of the second lens group and configured to move together with the second lens group; and

a third lens group having a positive focal length and arranged at a third position from the subject side,

wherein at least the first and second lens groups move at a time the zoom lens apparatus changes a scaling from a short focal length edge to a long focal length edge such that a distance between the first and second lens group is decreased and that a distance between the second and third lens group is increased,

wherein the first lens group comprises:

a first negative meniscus lens having a concave lens surface facing an image plane and arranged at a first in-group position from the subject side;

a double-convex lens arranged at a second in-group position from the subject side; and

a double-concave lens conjoined with the ~~double-concave~~ double-convex lens and arranged at a third in-group position from the subject side.

Claim 13 (Original): The zoom lens apparatus according to Claim 12, wherein the first lens group further comprises a second negative meniscus lens arranged between the first negative meniscus lens and the double-concave lens.

Claim 14 (Original): The zoom lens apparatus according to Claim 13, wherein the zoom lens apparatus satisfies an inequality condition $0.20<(D_4/L_1)<0.40$, wherein D_4 is a distance on a light axis between an image side surface of the second negative meniscus lens in the first lens group and a subject side surface of the double-convex lens and L_1 is a distance on a light axis between a subject side surface of the first negative meniscus lens and an image side surface of the double-concave lens in the first lens group.

Claim 15 (Currently Amended): The zoom lens apparatus according to Claim 13, wherein the zoom lens apparatus satisfies an inequality condition $1.60<(N_{14})<1.90$, wherein $\cancel{D_{14}}$ $\underline{N_{14}}$ is a refractive index of the double-concave lens of the first lens group.

Claim 16 (Original): The zoom lens apparatus according to Claim 15, wherein the zoom lens apparatus satisfies inequality conditions $-0.20<(N_{13}-N_{14})<0.10$ and $5<(\nu_{14}-\nu_{13})<25$, wherein N_{13} is a refractive index of the double-convex lens of the first lens group, N_{14} is a refractive index of the double-concave lens of the first lens group, ν_{13} is an Abbe number of the double-convex lens of the first lens group, and ν_{14} is an Abbe number of the double-concave lens of the first lens group.

Claim 17 (Original): The zoom lens apparatus according to Claim 13, wherein an image side surface of the second negative meniscus lens in the first lens group is aspheric.

Claim 18 (Original): The zoom lens apparatus according to Claim 13, wherein the second lens group comprises:

a first positive lens having a great-curvature surface facing the subject side and arranged at a first in-group position from the subject side;

a negative meniscus lens having a concave surface facing the image side and arranged at a second in-group position from the subject side;

a positive meniscus lens conjoined with the negative meniscus lens and arranged at a third in-group position from the subject side; and

a second positive lens arranged at a fourth in-group position from the subject side.

Claim 19 (Original): The zoom lens apparatus according to Claim 18, wherein the zoom lens apparatus satisfies inequality conditions $-0.15<(N_{22}-N_{23})<0.40$ and $25<(\nu_{23}-\nu_{22})<50$, wherein N_{22} is a refractive index of the negative meniscus lens of the second lens group, N_{23} is a refractive index of the positive meniscus lens conjoined with the negative meniscus lens in the second lens group, ν_{22} is an Abbe number of the negative meniscus lens of the second lens group, and ν_{23} is an Abbe number of the positive meniscus lens conjoined with the negative meniscus in the first lens group.

Claim 20 (Original): The zoom lens apparatus according to Claim 18, wherein the zoom lens apparatus satisfies an inequality condition $1.40<\{(1/r_{21F})+(1/r_{22F})+(1/r_{22F})(1/r_{22R})\}*Y'<2.20$, wherein r_{21F} is a curvature radius of a subject side surface of the first positive lens in the second lens group, r_{22F} is a curvature radius of a subject side surface of the negative meniscus lens in the second lens group, r_{22F} is a curvature radius of a conjoined surface of the negative meniscus lens and the positive meniscus lens in the second lens group, and Y' is an image height.

Claim 21 (Original): The zoom lens apparatus according to Claim 18, wherein the zoom lens apparatus satisfies an inequality condition $0.40<(L_{PN}/L_2)<0.70$, wherein L_{PN} is a distance on a light axis between the a subject side surface of the first positive lens and a

conjoined surface of the negative meniscus lens and the positive meniscus lens in the second lens group, and L_2 is a distance on a light axis between the subject side surface of the first positive lens and an image side surface of the second positive lens in the second lens group.

Claim 22 (Original): The zoom lens apparatus according to Claim 18, wherein a curvature of a conjoined surface of the negative meniscus lens and the positive meniscus lens in the second lens group is a greatest curvature in the second lens group.

Claim 23 (Original): The zoom lens apparatus according to Claim 18, wherein a subject side surface of the first positive lens and an image side surface of the second positive lens are aspheric.

Claim 24 (Original): The zoom lens apparatus according to Claim 12, wherein the second lens group comprises:

at least one negative lens; and

at least three positive lenses.

Claim 25 (Currently Amended): The zoom lens apparatus according to Claim 24, wherein the first lens group further comprises a second negative meniscus lens arranged between the first negative meniscus lens and the ~~double-concave~~ double-convex lens.

Claim 26 (Original): The zoom lens apparatus according to Claim 24, wherein the at-least-one negative lens is a negative meniscus lens having a concave surface facing the image side and arranged at a second in-group position from the subject side, and the at-least-one positive lenses are a first positive lens having a great-curvature surface facing the subject side

and arranged at a first in-group position from the subject side, a positive meniscus lens conjoined with the negative meniscus lens arranged at a third in-group position from the subject side, and a second positive lens arranged at a fourth in-group position from the subject side.

Claim 27 (Original): A digital camera comprising:

a zoom lens apparatus which comprises:

a first lens group having a negative focal length and arranged at a first position from a subject side;

a second lens group having a positive focal length and arranged at a second position from the subject side;

an aperture diaphragm arranged in front of a subject side surface of the second lens group and configured to move together with the second lens group; and

a third lens group having a positive focal length and arranged at a third position from the subject side,

wherein at least the first and second lens groups move at a time the zoom lens apparatus changes a scaling from a short focal length edge to a long focal length edge such that a distance between the first and second lens group is decreased and that a distance between the second and third lens group is increased,

wherein the first lens group comprises:

a first negative meniscus lens having a concave lens surface facing an image plane and arranged at a first in-group position from the subject side;

a double-convex lens arranged at a second in-group position from the subject side; and

a double-concave lens conjoined with the double-concave lens and arranged at a third in-group position from the subject side.

Claim 28 (Original): A personal digital assistance apparatus, comprising:

a zoom lens apparatus which comprises:

a first lens group having a negative focal length and arranged at a first position from a subject side;

a second lens group having a positive focal length and arranged at a second position from the subject side;

an aperture diaphragm arranged in front of a subject side surface of the second lens group and configured to move together with the second lens group; and

a third lens group having a positive focal length and arranged at a third position from the subject side,

wherein at least the first and second lens groups move at a time the zoom lens apparatus changes a scaling from a short focal length edge to a long focal length edge such that a distance between the first and second lens group is decreased and that a distance between the second and third lens group is increased,

wherein the first lens group comprises:

a first negative meniscus lens having a concave lens surface facing an image plane and arranged at a first in-group position from the subject side;

a double-convex lens arranged at a second in-group position from the subject side; and

a double-concave lens conjoined with the double-concave lens and arranged at a third in-group position from the subject side.